Table 3

Level	Thickness of substrate and polarizing film on photosensitive film side (mm)	Thickness of substrate and polarizing film on incident side (mm)	LCD dot shorter side length (mm)	Distance between LCD and photosensitive film (mm)	Diameter or equivalent diameter (mm)	Thickness (mm)	Thickness /diameter ratio	Evaluation
Example 3-1	0.93	0.93	0.13	0	5	15	3	2
Example 3-2	0.93	0.93	0.13	0.2	5	15	3	2
Example 3-3	0.93	0.93	0.13	0.5	5	15	3	2
Example 3-4	0.93	0.93	0.13	1	5	15	3	3
Example 3-5	0.93	0.93	0.13	2	5	15	3	3
Example 3-6	0.93	0.93	0.13	3	5	15	3	3.5
Example 3-7	0.57	0.57	0.13	1	5	15	3	2
Example 3-8	0.57	0.57	0.13	3	5	15	3	2.5
Example 3-9	0.93	0.93	0.13	3	1.5	4.5	3	3.5
Example 3-10	0.93	0.93	0.13	3	0.5	1.5	3	3.5
Example 3-11	0.93	0.93	0.13	3	0.5	3.5	7	1.5
Example 3-12	0.93	0.93	0.13	3	0.5	5	10	1
Example 3-13	0.93	0.93	0.13	3	0.5	10	20	1
Comparative Example 3-1	0.93	0.93	0.13	5	5	15	3	5
Comparative Example 3-2	0.57	0.57	0.13	5	5	15	3	5

(Examination of the Results)

As shown in Table 2, from the comparison of Examples 2-1 to 2-9 with Comparative Examples 2-1 to 2-4, it can be seen that when the sum totals of the thicknesses of the substrates 32, 36 and the polarizing film 31, 37 on the photosensitive film 4 side and the incident side are less than 1 mm, respectively, and the thickness of the porous plate 2 is three times the diameter of the through-holes 21, the dot transfer condition is markedly improved. In this case, the dot dimension (shorter side) of the LCD 3 does not influence so much.

As stated above, the reduction in the respective sum totals of the thicknesses of the substrates 32, 36 and the polarizing films 31, 37 on the photosensitive film 4 side and the incident side is very effective in improving the image quality. Specifically, when the sum total thickness t varies as: 0.93 mm, 0.75 mm, and 0.57 mm, the difference is clearly to be seen (comparison of Examples 2-1 to 2-4, Examples 2-5 to 2-8).

The distance between the LCD 3 and the photosensitive film 4 does not influence the image quality so much as long as it is within the range of approximately 3 mm (comparison of Examples 2-7 to 2-9). This is very advantageous in producing the apparatus since it facilitates the handling

of the photosensitive film 4 (film sheet).

As shown in Table 3, from the comparison of Examples 3-1 to 3-13 with Comparative Examples 3-1 and 3-2, it can be seen that while there is no great change as long as the distance between the LCD 3 and the photosensitive film 4 is approximately 3 mm or less, the dot transfer condition (clarity) deteriorates when the distance is 5 mm exceeding 3 mm.

The fact that the distance between the LCD 3 and the photosensitive film 4 does not influence the image quality so much as long as it is not more than 3 mm is very advantageous in producing the apparatus since it helps to facilitate the handling of the photosensitive film 4 (the above-mentioned film sheet). It can be seen that, if the sum total t of the thicknesses of the substrate 32 and the polarizing film 31 on the photosensitive film 4 side is the same as the sum total of the thicknesses of the substrate 36 and the polarizing film 37 on the incident side, as the distance between the LCD 3 and the photosensitive film 4 is gradually shortened as: 3 mm, 2 mm, 1 mm, and 0.5 mm, the evaluation becomes higher, providing increasingly satisfactory results.

Regarding the thickness of the porous plate 2, it can be seen that, from the relationship between the thickness